

BOOMTEC INDUSTRY

Recovering Energy. Powering Industry.

Plant-wide energy recovery solutions for waste heat, pressure energy, cold energy and online diagnostics.

Engineered turbine, ORC and compressor systems for complex industrial operating conditions.

国内网站: <http://www.boomtec.com>

国际网站: <http://www.boom-turbine.com>

联系方式: business@boomtec.com
Zhejiang Boomtec New Energy Technology Co., Ltd.

- Boomtec Industry is a China-based developer and manufacturer of industrial power equipment.
- Core platforms include magnetic-bearing turbines, axial turbines and magnetic-bearing compressors.
- Our engineering focus is the recovery of energy from low-pressure steam, low-grade heat, pressure letdown and challenging process media.
- Boomtec is building an integrated capability spanning turbines, compressors, heat pumps and online diagnostics.

All performance claims and project references are subject to project-specific verification and approval.

1. 企业简介

浙江博旭新能源为国内研发领先的动力装备制造制造商。公司先后研发、应用并迭代形成了完善的磁浮透平、轴流透平、磁浮压缩机产品系列。

公司在磁浮透平产品领域处于领军地位，先后开发应用了磁浮ORC、磁浮天然气、磁浮氮气透平，填补国内空白。在磁浮ORC领域，荣获了国家首台套国际先进认定，市场占有率超过80%，并领衔推动国家科技部地热磁浮透平产品研发。在磁浮天然气应用领域，我们即将开始调试国内第一套磁浮功率大、转速高的磁浮透平。

公司在轴流饱和蒸汽透平领域发展迅猛，先后研发并应用了超低压/低压汽轮机、中温饱和蒸汽轴排透平等高难度机型，超低压机组取得了省首台套认定，已先后在多个大化工项目实际应用效率表现优异。目前，公司在饱和蒸汽定制型全系列透平领域业绩突破近40套，单台最大处理流量150吨，饱和蒸汽大透平能够实现80%以上的高效、稳定运行。

2026年底，博旭将完成压缩机系列产品、核心设备在线诊断系统研发应用。届时，**博旭将有能力为大型化工企业提供透平、压缩机、热泵、在线诊断等一站式动力装备供应，从整体上解决客户节能分散实施带来的各种痛点。**

- Magnetic-bearing ORC turbine generators
- Reaction axial ORC turbine generators
- Ultra-low-pressure and saturated-steam turbines
- Medium- and high-pressure steam turbines
- Magnetic-bearing gas turbines and compressors
- LNG cold-energy, hydrogen, ammonia and CO2 expansion technologies
- Magnetic-bearing air compressors, high-temperature heat pumps and steam compressors



- Diagnose waste-heat, pressure-letdown and cooling-demand points across process and utility systems.
- Develop an integrated energy-station concept that accounts for operating fluctuations and future expansion.
- Select compression, heat-pump or turbine-driving routes according to actual process parameters.
- Coordinate multiple recovery units instead of implementing isolated modifications.

全厂能量综合利用方案

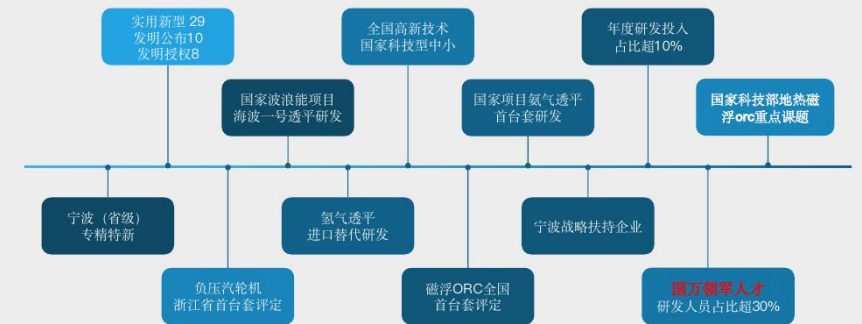


ORIGINAL TECHNICAL REFERENCE VISUAL

Featured capabilities include negative-pressure flash-steam expansion, water-erosion-resistant blade design and multi-unit dispatch.

- Sustained high-intensity investment in power-equipment research and product industrialization.
- R&D programs cover magnetic-bearing ORC, negative-pressure steam turbines, geothermal power, ammonia turbines, hydrogen turbines and wave energy.
- Recognized through national and provincial first-of-a-kind equipment programs and technology projects.

3. 研发实力



- 6 -



ORIGINAL TECHNICAL REFERENCE VISUAL

Specific patent counts and award wording should be confirmed before external quotation.

- 91°C negative-pressure steam-turbine engineering experience.
- National R&D participation in geothermal magnetic-bearing ORC technology.
- Development programs for ammonia turbines, high-speed magnetic-bearing natural-gas turbines and wave-energy turbines.
- R&D personnel represent more than 30% of the team; annual R&D investment exceeds 10% according to company materials.

研发实力·技术保障

国家课题承担·47项专利·研发投入占比超10%

磁悬浮ORC全国首台套

全国首台套认定,浙江省首台套认定,代表中国磁悬浮透平最高水平

负压汽轮机浙江省首台套

91°C负压蒸汽透平,突破低温含湿工质高效膨胀技术极限

国家科技部地热磁浮ORC

科技部重点研发课题,磁悬浮ORC与地热能综合利用技术攻关

国家氨气透平首台套研发

绿氨经济背景下的氨气透平国家进口替代重点课题

海波一号波浪能透平

国家波浪能专项,低压振荡水柱式透平,可与海上风电协同部署

国内首套高速磁浮天然气透平研发

打破国外技术垄断

47+

项授权专利

发明8项·软著17项·实用新型29项

>10%

研发投入占比

持续高强度研发投入

>30%

研发人员占比

博士/硕士技术团队

6+

国家级课题

科技部·工信部重点项目

Engineering data is reviewed for each customer application.

ORIGINAL TECHNICAL REFERENCE VISUAL

- Dedicated assembly capability for magnetic-bearing and heavy-duty turbines.
- Engineering technology center supported by machining, testing and digital-management systems.
- Industry-university-research collaboration supports product development and validation.
- Customized design, assembly and project delivery for application-specific operating conditions.



- Refining and petrochemicals: steam networks, pressure-letdown replacement, process heat and condensate.
- Natural gas and LNG: transmission pressure recovery, cold-energy generation and process energy recovery.
- Coal chemicals and fertilizer: flash steam, synthesis gas pressure, urea hot water and process waste heat.
- Metals, fiber and large industrial sites: hot water, esterification steam, flue gas and captive-power optimization.
- Emerging applications include compressed-energy storage, marine energy and special-gas expansion.

5. 行业应用介绍

应用行业	行业应用相关工艺段
石油炼化	管廊乏汽、工艺乏汽、饱和蒸汽、全厂热媒水、全厂减压阀组替代、工艺余热、膨胀压缩机组等
天然气	天然气输送压差发电、LNG汽化冷能发电、天然气化工工艺过程余热余压利用
煤化工	黑水闪蒸综合利用、精馏节能、合成气压差、全厂热媒水、减压阀组替代、工艺余热、工艺气体压差等
钢铁冶金	高炉煤气压差、导热油余热、烟气温差、全厂热媒水、全厂减压阀组替代等
化纤	PET合成过程中酯化蒸汽、酯化电厂高温冷凝水等
大型工业企业	自备电站纯凝机组、工艺减压发电机组、垃圾发电、生物质发电、地热发电站等
压缩气体储能	空气压缩及透平动力装备、二氧化碳压缩及透平动力装备
船舶舰艇	发动机尾气发电、缸套水余热发电、工艺热油系统冷却、波浪能发电
商业飞机	发动机尾气发电
汽车	重卡发动机碳捕集后烟气发电、高端燃油车尾气余热利用
海洋油气开采平台	燃气轮机尾气发电、地下水系统余热发电

Products and Reference Applications

- The following pages summarize representative technology platforms and application references.
- Project names and performance figures should be released externally only after internal and customer approval.



浙江博旭新能源科技有限公司

- 一、企业介绍
- 二、产品案例

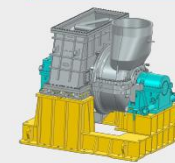
ORIGINAL TECHNICAL REFERENCE VISUAL

- Single-unit power coverage up to 20 MW.
- Saturated-steam flow handling up to 150 t/h.
- Axial-exhaust configurations available.
- Experience with wet steam, variable conditions and water-erosion protection.
- Application-specific aerodynamic and mechanical design.

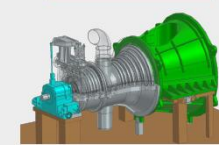
Reference applications include utility steam, PTA process steam, DMO process steam and flash steam.

1、蒸汽透平系列

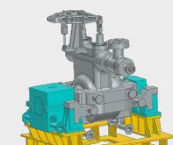
负压饱和蒸汽透平



中压蒸汽轴排透平



高压蒸汽透平



饱和蒸汽机型研发领先

- 单机功率覆盖20MW;
- 饱和蒸汽流量最大150t;
- 能够提供轴向排气机组;
- 高湿度(17%)机型经验;
- 防水蚀经验丰富;
- 主机全流程定制化开发;

饱和蒸汽业绩领先

- 全厂管廊乏汽: 浙石化
- PTA工艺乏汽: 大连逸盛
- DMO乏汽: 黔西煤化工
- 真闪乏汽: 黔西煤化工
- 工艺乏汽: 剑锋化工
-

Integrated High-Pressure Condensate Recovery

- Heat source: high-pressure condensate at 298°C and 14 MPa.
- Configuration: high-pressure flash + flash-steam turbine generation + flash-water ORC generation.
- Flash steam: 184°C, 1,100 kPa(A), 31.45 t/h.
- Flash water: 184°C, 1,100 kPa(A), 83.55 t/h.
- Installed capacity: 4,500 kW steam turbine + 1,500 kW ORC.

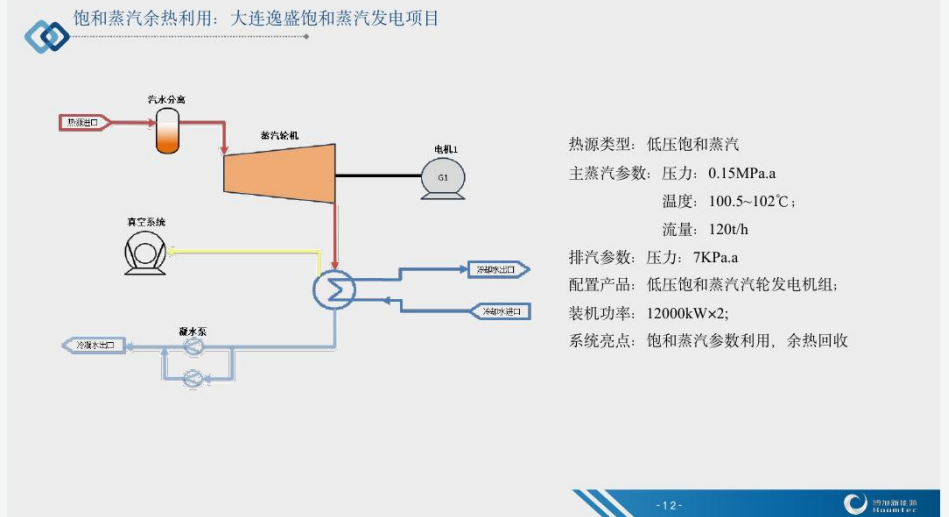
荣翔石化高压凝水综合利用能源站



热源类型: 高压凝水
 配置方案: 高压闪蒸 + 闪蒸汽汽轮机发电 + 闪蒸水ORC发电
 高压凝水温度: 298°C; 14Mpa
 闪蒸蒸汽: 184°C;
 压 力: 1100kPa (A)
 流 量: 31.45t/h
 闪蒸热水: 184°C;
 压 力: 1100kPa (A) ;
 流 量: 83.55t/h
 汽轮机装机: 4500kW
 ORC装机: 1500kW

Low-Pressure Saturated-Steam Generation

- Heat source: low-pressure saturated steam.
- Inlet: 0.15 MPa(A), 100.5-102°C, 120 t/h.
- Exhaust pressure: 7 kPa(A).
- Equipment: low-pressure saturated-steam turbine-generator set.
- Installed capacity: 12,000 kW x 2.



ORIGINAL TECHNICAL REFERENCE VISUAL

Ultra-Low-Pressure Steam Recovery

- Heat source: flash steam from a low-pressure steam network.
- Inlet: 0.10-0.12 MPa(A), 100.5-102°C, 33 t/h.
- Exhaust pressure: 8 kPa(A).
- Equipment: ultra-low-parameter saturated-steam turbine generator.
- Installed capacity: 2,500 kW.

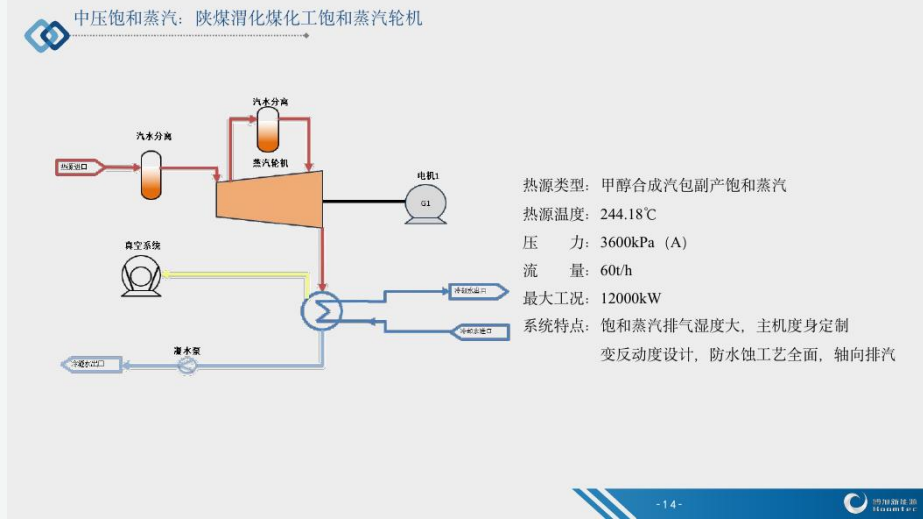
超低压饱和蒸汽利用：浙石化乏汽回收消白技改项目



热源类型：低压蒸汽管网闪蒸汽
 主蒸汽参数：压力：0.1~0.12MPa.a
 温度：100.5~102℃；
 流量：33t/h
 排汽参数：压力：8KPa.a
 配置产品：超低参数饱和蒸汽汽轮发电机组；
 装机功率：2500kW；
 系统亮点：超低压蒸汽参数利用，余热回收

Medium-Pressure Saturated-Steam Turbine

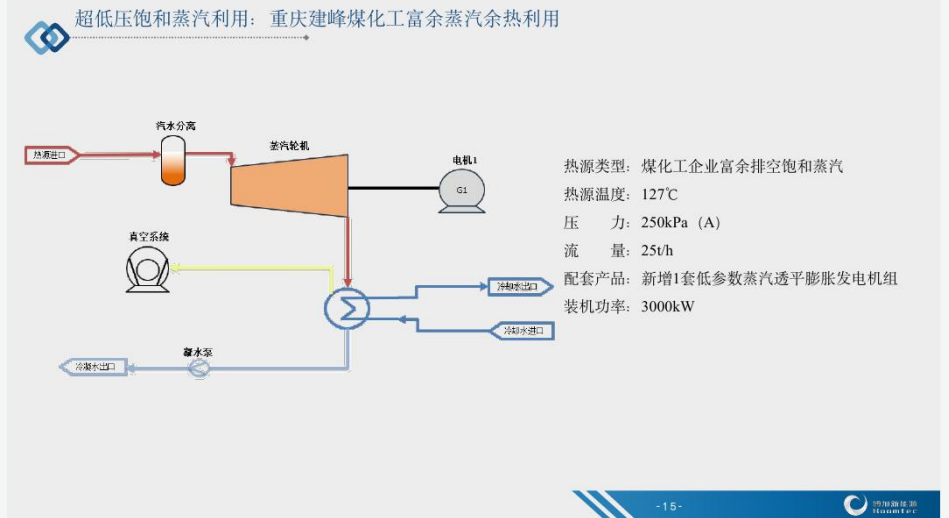
- Heat source: by-product saturated steam from methanol synthesis.
- Inlet: 244.18°C, 3,600 kPa(A), 60 t/h.
- Maximum operating output: 12,000 kW.
- Customized for high exhaust moisture with variable-reaction design, water-erosion protection and axial exhaust.



ORIGINAL TECHNICAL REFERENCE VISUAL

Surplus Saturated-Steam Recovery

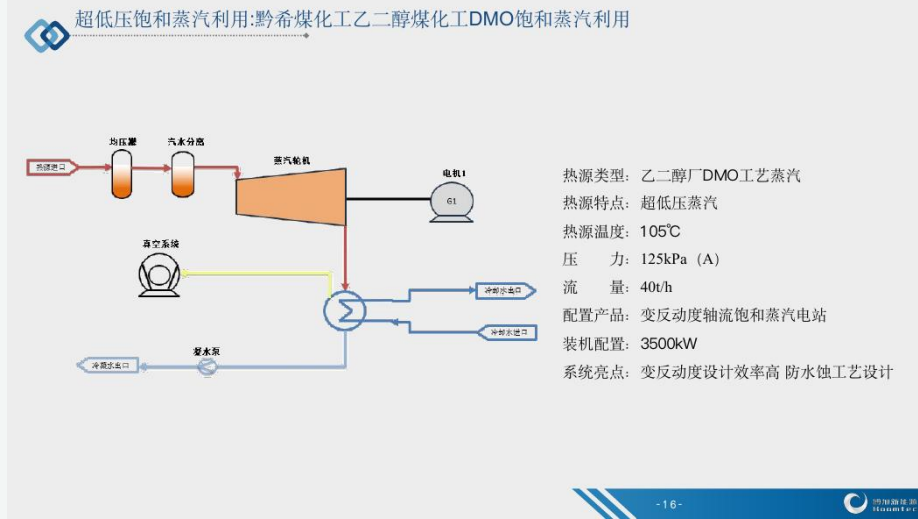
- Application: recovery of vented surplus saturated steam in a coal-chemical plant.
- Heat source: 127°C, 250 kPa(A), 25 t/h.
- Equipment: low-parameter steam-turbine expansion generator.
- Installed capacity: 3,000 kW.



ORIGINAL TECHNICAL REFERENCE VISUAL

DMO Process Steam Recovery

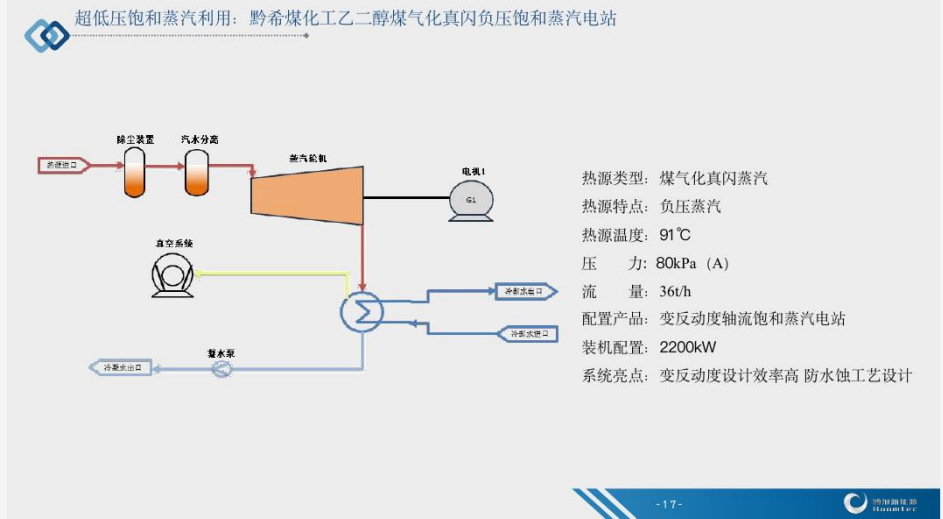
- Heat source: ultra-low-pressure DMO process steam from an ethylene-glycol plant.
- Inlet: 105°C, 125 kPa(A), 40 t/h.
- Equipment: variable-reaction axial saturated-steam power unit.
- Installed capacity: 3,500 kW.
- Design focus: efficiency under variable conditions and water-erosion resistance.



ORIGINAL TECHNICAL REFERENCE VISUAL

91°C Negative-Pressure Steam Recovery

- Heat source: negative-pressure flash steam from coal gasification.
- Inlet: 91°C, 80 kPa(A), 36 t/h.
- Equipment: variable-reaction axial saturated-steam power unit.
- Installed capacity: 2,200 kW.
- Design focus: efficient expansion of low-temperature wet steam and water-erosion protection.



ORIGINAL TECHNICAL REFERENCE VISUAL

- Magnetic-bearing ORC: 300-2,000 kW single-unit coverage.
- Reaction axial ORC: 2-10 MW single-unit coverage.
- Designed for low-grade industrial heat, hot water, geothermal resources and difficult process media.
- Magnetic-bearing units offer oil-free, variable-speed operation; axial units support larger and stable heat sources.

2. ORC透平系列

磁浮ORC透平



磁浮ORC市场领军

- 市场占有率超过60%;
- 单机功率覆盖300-2000kw;
- 国家首台套评定;
- 在煤化工、石化等行业大量应用;

反动轴流ORC透平



反动轴流ORC变工况性能优

- 单机功率覆盖2-10MW;
- 多级高反动度变工况性能优异;
- 机封系统成熟;
- 在煤化工、石化等行业大量应用;

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BOOMTEC

ORIGINAL TECHNICAL REFERENCE VISUAL

Market-share claims are intentionally omitted pending a unified approved external-data register.

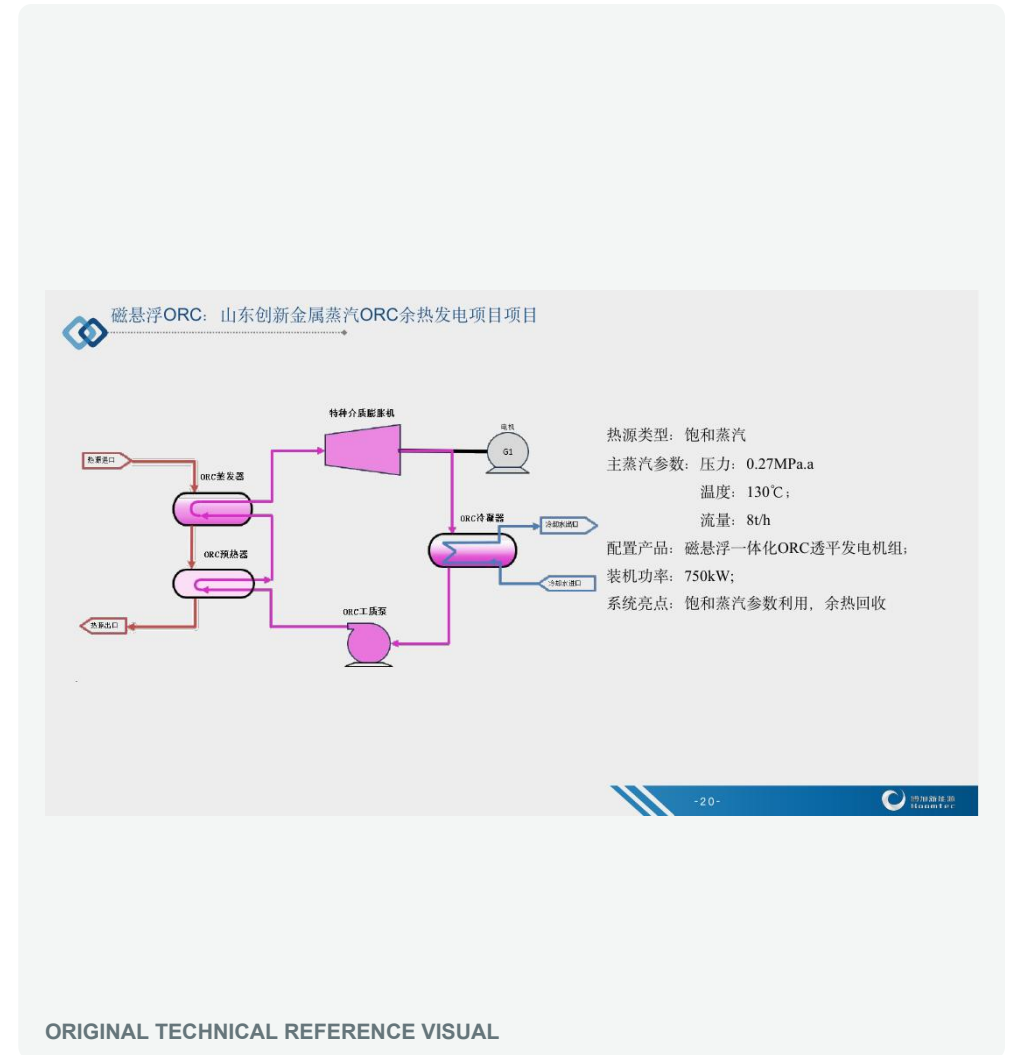
PET Esterification-Steam ORC

- Heat source: saturated esterification steam with corrosive characteristics.
- Heat-source temperature: 100°C.
- Equipment: magnetic-bearing ORC power station.
- Installed capacity: 550 kW x 2.
- Reported generation: 52 kWh per tonne of product.
- Highlights: high efficiency, oil-free system, variable-speed operation and minimized leakage risk.



Saturated-Steam ORC Recovery

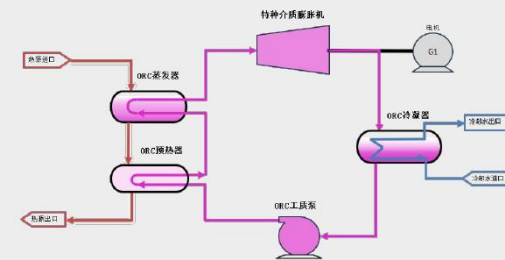
- Heat source: saturated steam at 0.27 MPa(A), 130°C and 8 t/h.
- Equipment: integrated magnetic-bearing ORC turbine-generator set.
- Installed capacity: 750 kW.
- Objective: recover usable energy from saturated-steam conditions.



Multi-Source Hot-Water ORC

- Heat source: seven hot-water streams combined from two process units.
- Combined source: 0.25 MPa(A), 124.5°C, 110 t/h.
- Equipment: integrated magnetic-bearing ORC turbine-generator set.
- Installed capacity: 650 kW.

磁悬浮ORC：宁波中金石化热水ORC余热发电项目

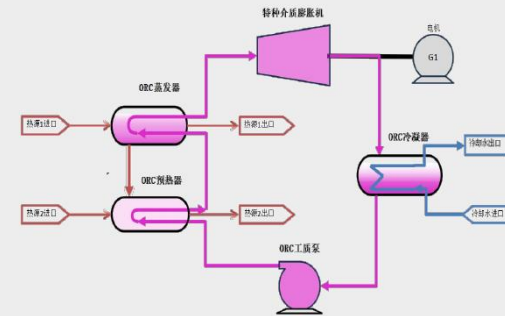


热源类型：四联合及二联合的7股热水
 混合后热源参数：压力：0.25MPa.a
 温度：124.5℃；
 流量：110t/h
 配置产品：磁悬浮一体化ORC透平发电机组；
 装机功率：650kW；
 系统亮点：四联合及二联合的7股热水混合参数
 利用，余热回收

Urea-Plant Hot-Water ORC

- Heat source 1: 105°C, 0.35 MPa(A), 200 t/h.
- Heat source 2: 100°C, 0.60 MPa(A), 45 t/h.
- Equipment: integrated magnetic-bearing ORC turbine-generator set.
- Installed capacity: 550 kW.
- Engineering focus: combined recovery from two heat-source streams.

磁悬浮ORC：安徽晋煤中能尿素装置热水ORC发电项目

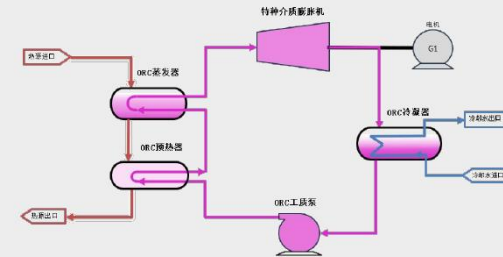


热源类型：尿素装置热水
 主蒸汽参数：热源1：压力：0.35MPa.a
 温度：105°C；
 流量：200t/h
 热源2：压力：0.6MPa.a
 温度：100°C；
 流量：45t/h
 配置产品：磁悬浮一体化ORC透平发电机组；
 装机功率：550kW；
 系统亮点：两股热源参数利用，余热回收

Low-Flash-Steam ORC

- Heat source: low-pressure-network flash steam.
- Inlet: 0.10 MPa(A), 120.2°C, 10 t/h.
- Equipment: integrated magnetic-bearing ORC turbine-generator set.
- Installed capacity: 1,000 kW.

磁悬浮ORC：安徽晋煤中能低闪蒸汽ORC余热发电项目



热源类型：低压蒸汽管网闪蒸汽

主蒸汽参数：压力：0.1MPa.a

温度：120.2°C；

流量：10t/h

配置产品：磁悬浮一体化ORC透平发电机组；

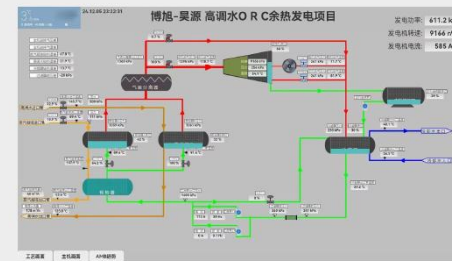
装机功率：1000kW；

系统亮点：低闪蒸汽参数利用，余热回收

Urea Hot Water and Condensate ORC

- Urea hot water: 133°C, 800 kPa(A), 170 t/h.
- Steam condensate: 125°C, 300 kPa(A), 75 t/h.
- Equipment: integrated magnetic-bearing ORC turbine-generator set.
- Installed capacity: 750 kW.
- Highlights: oil-free magnetic-bearing system, variable-speed operation and minimized leakage risk.

安徽昊源热水磁浮ORC发电



热源类型: 尿素高调水以及蒸汽凝液余热

尿素高调水: 温度: 133°C

压力: 800kPa (A)

流量: 170t/h

蒸汽凝液: 温度: 125°C

压力: 300kPa (A)

流量: 75t/h

配置产品: 磁悬浮一体化ORC透平发电机组

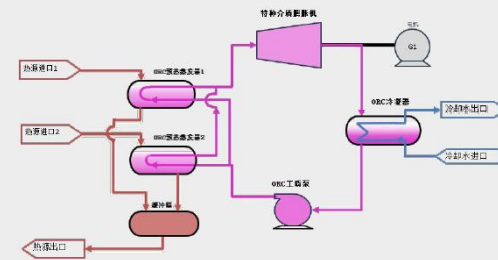
装机配置: 750kW

系统亮点: 磁浮机组效率高、无泄漏、无油站、变转速运行

Deaerator Exhaust-Steam ORC

- Medium-pressure exhaust: 132°C, 200 kPa(A), 8 t/h, approximately 30% dryness.
- Low-pressure exhaust: 110°C, 200 kPa(A), 10 t/h, approximately 30% dryness.
- Equipment: integrated magnetic-bearing ORC turbine-generator set.
- Installed capacity: 400 kW.
- Engineering focus: combined recovery from two two-phase heat sources.

磁浮ORC:国宏化工除氧器乏汽利用



应用场景: 煤化工企业除氧器乏汽余热ORC发电
 中压除氧器乏汽: 温度: 132°C; 压力: 200kPa (A)
 流量: 8t/h, 干度30%
 低压除氧器乏汽: 温度: 110°C; 压力: 200kPa (A)
 流量: 10t/h, 干度30%

产品配套: 新增1套磁悬浮一体化ORC透平发电机组
 装机功率: 400kW

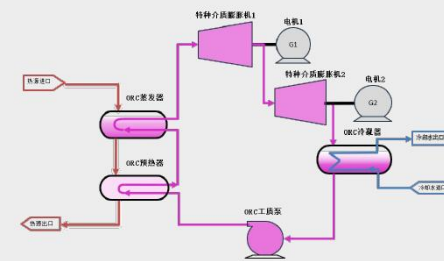
工艺包要点:

1. 两股热源综合利用;
2. 两股热源均为气液两相;

Urea Hot-Water Waste-Heat Recovery

- Application: urea-plant hot-water energy recovery.
- Heat source: 142°C, 500 kPa(A), 300 m³/h.
- Equipment: two integrated magnetic-bearing ORC turbine-generator sets.
- Installed capacity: 650 kW x 2.

磁浮ORC：心连心尿素高调水余热利用



应用场景：煤化工企业尿素高调水

热源温度：142℃

压力：500kPa (A)

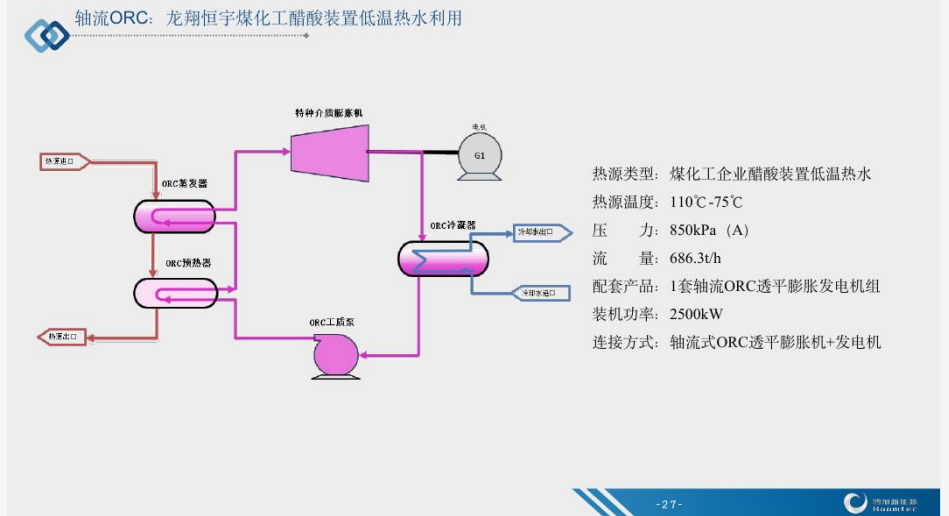
流量：300m³/h

配套产品：新增2套磁悬浮一体化ORC透平发电机组

装机功率：650kW * 2

Large-Flow Low-Temperature Hot-Water ORC

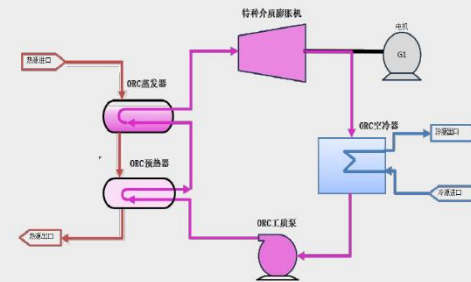
- Heat source: low-temperature hot water from an acetic-acid unit.
- Temperature range: 110°C to 75°C.
- Pressure: 850 kPa(A); flow: 686.3 t/h.
- Equipment: reaction axial ORC turbine expansion generator.
- Installed capacity: 2,500 kW.



ORIGINAL TECHNICAL REFERENCE VISUAL

- Heat source: geothermal water.
- Source conditions: 108°C and 1,500 t/h.
- Equipment: split-type axial ORC generator set.
- Installed capacity: 6,000 kW.
- Objective: recover low-grade geothermal heat for power generation.

地热水利用：西藏那曲市地热水ORC余热发电项目



热源类型：地热水

热源参数：温度：108°C；

流量：1500t/h

配置产品：轴流分体式ORC发电机组；

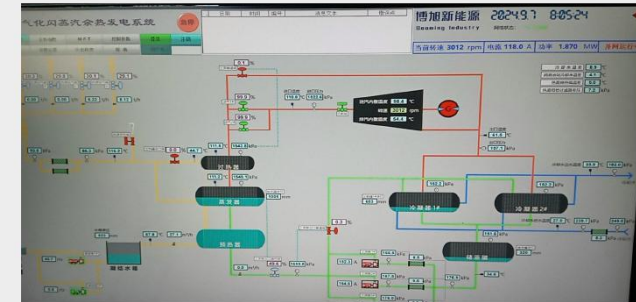
装机功率：6000kW；

系统亮点：地热水余热回收，余热利用

Corrosive Low-Flash-Steam ORC

- Heat source: low-flash steam from coal gasification in a methanol plant.
- Characteristics: dusty and corrosive process medium.
- Heat-source temperature: 115°C.
- Equipment: reaction axial ORC power station.
- Installed capacity: 2,200 kW.
- Reported turbine internal efficiency: above 90% under the referenced design.

轴流ORC: 晋煤华昱甲醇厂煤气化低闪蒸汽余热利用



热源类型: 甲醇厂煤气化低闪蒸汽

热源特点: 含粉尘带腐蚀性

热源温度: 115°C

配置产品: 反动式轴流ORC电站

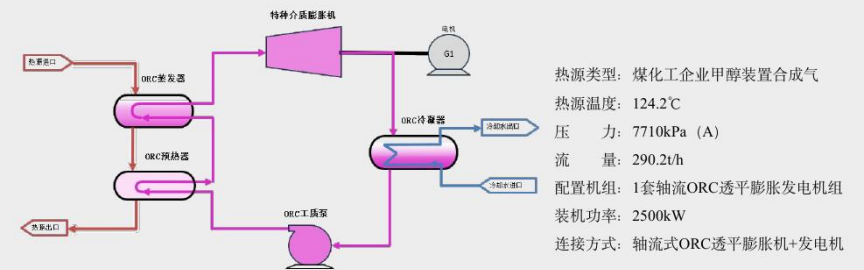
装机配置: 2200kW

系统亮点: 反动式预扭叶片 主机内效率>90%

Methanol Synthesis-Gas Waste-Heat ORC

- Heat source: synthesis gas from a methanol unit.
- Conditions: 124.2°C, 7,710 kPa(A), 290.2 t/h.
- Equipment: axial ORC turbine expansion generator.
- Installed capacity: 2,500 kW.

轴流ORC: 龙翔恒宇煤化工甲醇合成气余热利用



- Rated inlet: natural gas at 5.1 MPa(A), 38.5°C and 13.25 t/h.
- Exhaust pressure: 1.8 MPa(A).
- Equipment: magnetic-bearing natural-gas turbine expansion generator.
- Installed capacity: 400 kW; rated speed: 35,000 rpm.
- Application: pressure-energy recovery with interstage reheating.

3、天然气透平系列

磁浮天然气透平发电机

热源类型: 天然气

额定工况参数: 压力: 5.1MPa.a

温度: 38.5°C;

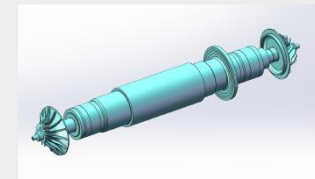
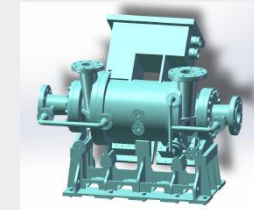
流量: 13.25t/h

排汽参数: 压力: 1.8MPa.a

配置产品: 磁浮天然气透平膨胀发电机组;

装机功率: 400kW 转速: 35000

系统亮点: 天然气余压利用, 级间复温



- Integrated magnetic-bearing ethylene turbine-compressor for process-gas expansion and compression.
- High-pressure ammonia radial-turbine generator with single- or multi-stage configuration.
- High-speed hydrogen radial turbine for hydrogen-rich synthesis gas.
- Core magnetic bearings, generators and turbine stages are developed as an integrated system.

These technologies are strategic development products; confirm export readiness before active sales.

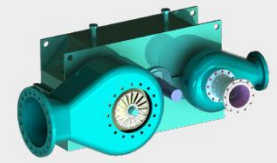
4. 特种透平



- 乙烯磁悬浮透平压缩一体机**
- 适用于乙烯工艺气体压缩膨胀
 - 适用于单机1Mw以内机型
 - 主机无机封、无泄漏、安全性高
 - 变转速发电系统适应于变工况场景
 - 磁轴承/发电机/透平全自主设计生产



- 氨气双级离心透平机组**
- 适用于高压力机型
 - 单级或多级离心涡轮与发电机一体化
 - 机械密封系统成熟稳定
 - 国内首套



- 氢气高速离心透平机组**
- 适用于氢气为主的合成气
 - 单级或多级离心涡轮与齿轮箱一体化
 - 干气密封系统成熟稳定
 - 进口替代

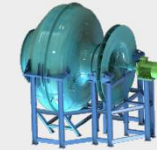
- Axial CO₂ turbine for large-flow pressure-energy recovery and variable operating conditions.
- Air turbines for compressed-air energy-storage systems using radial and axial configurations.
- Low-pressure oscillating-water-column turbine technology for wave-energy generation.
- Customized single-shaft and multi-shaft arrangements are available for engineering development.

5. 特种透平



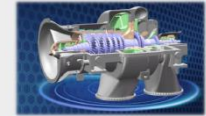
二氧化碳轴流透平

- 适用于大流量二氧化碳透平
- 变反动度通流设计内效率90%
- 多级设计适应于变工况场景



海洋波浪发电透平

- 适用于海洋波浪能发电
- 单机功率负荷在100Kw以内
- 研发类机组



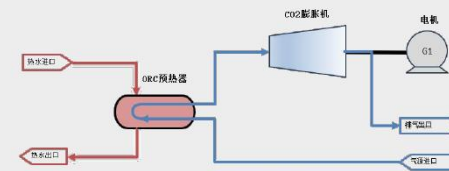
空气透平

- 适用于空气压缩膨胀储能系统
- 向心及轴流机型组合应用
- 同轴或多轴机型定制开发

CO2 Pressure-Energy Recovery

- Application: CO2 pressure-energy recovery from a low-temperature methanol-wash process.
- Inlet: 31°C, 280 kPa(A), 126 t/h.
- Equipment: axial CO2 turbine expansion generator.
- Installed capacity: 1,500 kW.
- Process considerations: preheat CO2 with hot water, control exchanger pressure drop and meet downstream exhaust-temperature requirements.

二氧化碳压差利用:心连心二氧化碳余压利用



应用场景: 煤化工企业低温甲醇洗二氧化碳压力能利用发电

热源温度: 31°C

压力: 280kPa (A)

流量: 126t/h

产品配套: 新增1套轴流二氧化碳透平膨胀发电机组

装机功率: 1500kW

工艺包要点:

需要以热水先预热CO₂, 并控制换热过程阻力降;

后端工艺对排气温度有要求。

Ammonia Turbine Demonstration


- Heat source: geothermal ammonia vapor.
- Medium characteristics: flammable, explosive and corrosive.
- Heat-source temperature: 56°C; pressure ratio: approximately 2.3.
- Equipment: two-stage high-speed integrated turbine generator.
- Installed capacity: 13 kW.
- Positioning: first-of-a-kind domestic research demonstration.

氨气透平：中科院地热氨蒸汽发电站



热源类型：地热氨蒸汽
 热源特点：易燃易爆易腐蚀
 热源温度：56°C 进排气压力：2.3
 配置产品：双极高速透平发电一体发电机
 装机配置：13kW
 系统亮点：国内首台套 国家课题项目

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ORIGINAL TECHNICAL REFERENCE VISUAL

Wave-Energy Turbine Generator

- Heat source: oscillating ocean-wave energy.
- Equipment: newly developed low-pressure turbine expansion generator.
- Project details are confidential.

波浪能透平发电机



热源类型: 海洋波浪能
配套产品: 新研发1套低压力透平膨胀发电机组
其余信息: 保密

- Wide-temperature-range heating with stable output up to 130°C.
- Large-capacity design with single-unit heating capacity up to 3.5 MW.
- Uses low-GWP and zero-ODP working-fluid options.
- Integrated system architecture for industrial hot-water and steam-generation applications.

6. 压缩机



磁浮超高温热泵

- ◎ 宽温区制热，可最高稳定制取130℃热量
- ◎ 大容量设计，单机制热量可达3.5MW
- ◎ 采用低GWP和ODP环保工质
- ◎ 一体化设计，集成度高

型号	热源进口温度 (°C)	热源出口温度 (°C)	热水流量 (t/h)	输入功率 (kW)	制热量 (kW)	制取温度 (°C)	产汽量 (t/h)	用电成本 (万元/年)	产汽效益 (万元/年)	净效益 (万元/年)
BMHP-3500-900	90	85	453.7	897.0	3500	130	5	287.0	720	433.0
BMHP-3500-970		80	221.1	969.0						
BMHP-3500-1050	80	75	431.1	1041.3				333.2		386.8
BMHP-3500-1120		70	209.7	1113.8				356.4		363.6
BMHP-3500-1335	60	55	384.7	1131.9				426.2		293.8
BMHP-3500-1410		50	186.4	1404.7				449.5		270.5
BMHP-3500-1650	40	35	337.7	1621.6				518.9		201.1
BMHP-3500-1700		30	163.0	1693.2				541.8		178.2

注：该机型工质为R1233zd(e)，电价0.4元/度，蒸汽价格180元/吨。

Economic results depend on site electricity price, steam value, source temperature and annual operating hours.

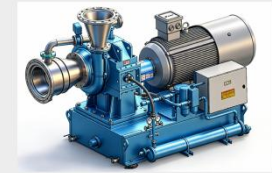
- Magnetic-bearing air compressor: 40-150 m³/min, pressure up to 8 bar, oil-free compressed air and low-noise operation.
- Steam compressor: 1-220 t/h, outlet pressure 0.15-1.5 MPa, single-stage temperature rise up to 24°C.
- Steam-compressor stable flow range: approximately 50%-120% of design flow.
- Integrated skid-mounted and customized configurations support rapid deployment.

6. 压缩机



磁浮空气压缩机

- 流量覆盖40-150m³/min, 压力最高8bar
- 无油洁净, 产出100%无油压缩空气
- 磁悬浮轴承免维护, 寿命超20年
- 稳定低噪, ≤80dB



水蒸汽压缩机

- 流量覆盖1-220t/h, 出口压力0.15-1.5Mpa, 单级最高温升24°C
- 工况适应能力, 稳定处理流量50%-120%
- 集成式撬装, 快速部署
- 定制化多种型式机型

Discuss an industrial energy-recovery opportunity

- Share the operating medium, composition, temperature, pressure, flow rate, annual operating hours and required outlet conditions.
- Boomtec will conduct an initial route screening for ORC, saturated-steam expansion or other applicable recovery technologies.

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WhatsApp

Scan to contact Boomtec overseas BD



Zhejiang Boomtec New Energy Technology Co., Ltd.